

Application Serial No. 10/573,975
Response filed October 21, 2011
Reply to Office Action mailed June 21, 2011

List of the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

The claims have not been amended. The following list of claims, rather, is presented for the convenience of the reader.

1-14. (cancelled)

15. (previously presented) A method of determining a local position of a first mobile radio communication terminal device in a radio cell of a radio network of a radio communication system, wherein the radio cell is fixed by a base station, the method comprising:

before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio terminal device, wherein the preceding inquiry signal is a broadcast radio signal;

transmitting, from the first mobile radio communication terminal device, after receipt of the acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal;

transmitting position information by at least one radio signal from at least one second mobile radio communication terminal device, the location of which is known either to the at least one second mobile radio communication terminal device or to the radio network, and which is either in the radio cell or in another radio cell, the at least one radio signal being transmitted to the first mobile radio communication terminal device via either a direct radio connection or an indirect radio connection via the radio network;

inferring a distance between the first mobile radio communication terminal device and the at least one second mobile radio communication terminal device on the basis of the signal propagation time of the at least one radio signal.

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16-19. (canceled)

20. (previously presented) A method according to claim 15, wherein each second mobile radio communication terminal device sends the one radio information signal within a predetermined response period for each respective second mobile radio communication terminal device.

21. (previously presented) A method according to claim 15, wherein a predetermined minimum accuracy of a position of each second mobile radio communication terminal device is a condition for each respective second mobile radio communication terminal device to send the acknowledgement signal.

22. (previously presented) A method according to claim 15, wherein a time difference between a receipt of the retrieval signal and a sending the radio information signal by each respective second mobile radio communication terminal device is included in each radio information signal as a position parameter of the position information.

23. (previously presented) A method according to claim 22, wherein a current position of each respective second mobile radio communication terminal device and/or a sending time of the radio information signal from each respective second mobile radio communication terminal device is included in each radio information signal as a position parameter of the position information.

24. (previously presented) A method according to claim 15, further comprising calculating the position of the first mobile radio communication terminal device via a Round Trip Time (RTT), an Observed Time Difference of Arrival (OTDOA) using the position information included in each radio information signal, and/or a Global Positioning System (GPS) position device in the first mobile radio communication terminal device using the position information included in each radio information signal.

25. (previously presented) A method according to claim 24, wherein, in the calculating, position information received by the first mobile radio communication terminal device is used.

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26. (previously presented) A method according to claim 15, further comprising transmitting the position information received by the first mobile radio communication terminal device to a position determining unit in the radio network which calculates a current local position of the first mobile radio communication terminal device.

27. (previously presented) A radio communication terminal device, comprising:
an inquiry unit using a broadcast radio signal as a preceding inquiry signal for requesting information of readiness to participate in the position determination and position information from at least one mobile radio communication terminal device located in a radio cell of a radio network of a radio communication system or in a different radio cell, wherein the radio cells are fixed by base stations, a position of the at least one mobile radio communication terminal device being known to either the at least one mobile radio communication terminal device or to the radio network;

a receiving unit receiving at least one radio information signal respectively from the at least one mobile radio communication terminal device and evaluating the received at least one radio information signal, each radio information signal including acknowledged information of the readiness to participate in the position determination or position information of the known position of the respective at least one mobile communication terminal device sending the radio information signal,

wherein the at least one radio information signal is transmitted via either a direct radio connection or an indirect radio connection via the radio network;

and wherein a distance between the radio communication terminal device and the at least one mobile radio communication terminal device is inferred on the basis of the signal propagation time of the at least one radio signal.

28. (previously presented) A radio communication system comprising the radio communication terminal device of claim 27.